



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/923,848	08/06/2001	Alan Rubinstein	3COM-3651.BCG.US.P	2022

7590 01/10/2005  
WAGNER, MURABITO & HAO LLP  
Third Floor  
Two North Market Street  
San Jose, CA 95113

EXAMINER
SHAH, CHIRAG G

ART UNIT	PAPER NUMBER
2664	

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/923,848	Applicant(s) <b>RUBINSTEIN ET AL.</b>	
	Examiner Chirag G Shah	Art Unit 2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11/22/04.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-30 rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al (WO 00/30293), hereinafter, Johnson in view of Fletcher et al (U.S. Patent No. 6,085,243), hereinafter Fletcher.

Referring to claim 1, Johnson discloses in figure 2 of an intelligent device 106 (Fixed Diagnostic Unit and Roving Diagnostic Unit) for coupling an electronic device (hub) to a network (100) comprising: a first interface (port 1) for communicatively coupling said intelligent device 106 to said network 100; a second interface (port 2) for communicatively coupling said intelligent device 106 to a plurality of client devices (such as S2) such that said client devices are communicatively coupled to said network as in figures 2, 3, 17, 19 and 20; means for processing and interpreting data coupled to said first interface (as disclosed in column 5, lines 25-42); and fault detection means coupled to said means for processing and interpreting data, said fault detection means for performing fault detection in said network as disclosed on page 5, lines 25 to page 6, lines 27 as claim. Johnson fails to disclose the network having a head end wherein the

Art Unit: 2664

head end is a central control site operable to remotely access the intelligent device over the network. Although Johnson discloses of a second interface communicatively coupling the intelligent device to a plurality of client devices in the hub 102, Johnson fails to explicitly disclose a second interface comprising a plurality of communication ports for communication coupling. Fletcher teaches in figure 1, 8 and 12 and specifically discloses in col. 4, lines 12-63 of a Remote Monitoring technology (RMON) designed to facilitate the monitoring and reporting of data traffic statistics in LAN or WAN. A RMON Manager performs a controlled operation of the probe and collects the statistics and data captured by the probe. RMON Manager, function and serves as a stand-alone probe that is constantly on duty and only require communication with a management application such as an SNMP, RMON and RMON2). It has become common place for ISs, particularly hubs and switch/bridges to embed RMON probe function. Thus, the hub 62 disclosed in figure 1 has embedded RMON probe function. Furthermore, as disclosed in figure 8, Management station 84 functioning as a head end can remotely access the intelligent device for RMON probe monitoring functionality. Note, Fletcher further discloses in figure 1 of a second interface comprising a plurality of communication ports (ports connecting 72a, 72b, 72C, 72D) for communication coupling of the intelligent device (62) to a plurality of client devices (52a, 52b, 52c etc...). Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to modify the teachings of Johnson to include a management station head end capable of remotely monitoring the intelligent device as taught by Fletcher in order

Art Unit: 2664

to collect important network packet exchanges and analyze them for proactive performance management.

Referring to claim 11, Johnson discloses in figure 2 of an intelligent device 106 (Fixed Diagnostic Unit and Roving Diagnostic Unit) for coupling an electronic device (hub) to a network comprising: a first interface (port 1) for communicatively coupling said intelligent device to said network 100; a second interface (port 2) for communicatively coupling said intelligent device 106 to a plurality of client devices (such as S2) such that said client devices are communicatively coupled to said network; a robust processor 110 coupled to said first interface; and a fault detector 108 coupled to said robust processor 110 as further disclosed in figure 3. Johnson fails to disclose the network having a head end wherein the head end is a central control site operable to remotely access the intelligent device over the network. Although Johnson discloses of a second interface communicatively coupling the intelligent device to a plurality of client devices in the hub 102, Johnson fails to explicitly disclose a second interface comprising a plurality of communication ports for communication coupling. Fletcher teaches in figure 1, 8 and 12 and specifically discloses in col. 4, lines 12-63 of a Remote Monitoring technology (RMON) designed to facilitate the monitoring and reporting of data traffic statistics in LAN or WAN. A RMON Manager performs a controlled operation of the probe and collects the statistics and data captured by the probe. RMON Manager, function and serves as a stand-alone probe that is constantly on duty and only require communication with a management application such as an SNMP, RMON and RMON2). It has become common place for ISs, particularly hubs and

Art Unit: 2664

switch/bridges to embed RMON probe function. Thus, the hub 62 disclosed in figure 1 has embedded RMON probe function. Furthermore, as disclosed in figure 8, Management station 84 functioning as a head end can remotely access the intelligent device for RMON probe monitoring functionality. Note, Fletcher further discloses in figure 1 of a second interface comprising a plurality of communication ports (ports connecting 72a, 72b, 72C, 72D) for communication coupling of the intelligent device (62) to a plurality of client devices (52a, 52b, 52c etc...). Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to modify the teachings of Johnson to include a management station head end capable of remotely monitoring the intelligent device as taught by Fletcher in order to collect important network packet exchanges and analyze them for proactive performance management.

Referring to claim 21, Johnson discloses on page 5, lines 25 to page 6, lines 27 and In figure 2 of a method for fault detection in a network, said method comprising the steps of:

a) providing an intelligent device 106 coupled to a network 100, said intelligent device 106 comprising a first interface (port 1) for communicatively coupling said intelligent device 106 to said network, a second interface (port 2) for communicatively coupling said intelligent device to a plurality of client devices (such as S2), a robust processor 110 coupled to said first interface (port 1), and a fault detector 108 coupled to said robust processor 110;

Art Unit: 2664

b) monitoring said network for a fault by said intelligent device and said head end 102, such that said intelligent device 106 and said head end 102 operate in conjunction as disclosed on page 5, lines 25 to page 6, lines 27 as claim.

Johnson fails to disclose the network having a head end wherein the head end is a central control site operable to remotely access the intelligent device over the network. Although Johnson discloses of a second interface communicatively coupling the intelligent device to a plurality of client devices in the hub 102, Johnson fails to explicitly disclose a second interface comprising a plurality of communication ports for communication coupling. Fletcher teaches in figure 1, 8 and 12 and specifically discloses in col. 4, lines 12-63 of a Remote Monitoring technology (RMON) designed to facilitate the monitoring and reporting of data traffic statistics in LAN or WAN. A RMON Manager performs a controlled operation of the probe and collects the statistics and data captured by the probe. RMON Manager, function and serves as a stand-alone probe that is constantly on duty and only require communication with a management application such as SNMP, RMON and RMON2). It has become common place for ISs, particularly hubs and switch/bridges to embed RMON probe function. Thus, the hub 62 disclosed in figure 1 has embedded RMON probe function. Furthermore, as disclosed in figure 8, Management station 84 functioning as a head end can remotely access the intelligent device for RMON probe monitoring functionality. Note, Fletcher further discloses in figure 1 of a second interface comprising a plurality of communication ports (ports connecting 72a, 72b, 72C, 72D) for communication coupling of the intelligent device (62) to a plurality of client devices (52a, 52b, 52c etc...). Therefore, it would

Art Unit: 2664

have been obvious to one of ordinary skills in the art at the time of the invention to modify the teachings of Johnson to include a management station head end capable of remotely monitoring the intelligent device as taught by Fletcher in order to collect important network packet exchanges and analyze them for proactive performance management.

Referring to claim 2, 12, and 22, Fletcher disclosed in figure 8, Management station 84 functioning as a head end can remotely access the intelligent device (62) for RMON probe monitoring functionality.

Referring to claim 3, 13, and 23, Johnson discloses in figure 3 in conjunction to figure 2 and on page 7, lines 12 to page 8, lines 27 of an intelligent device 106 as recited wherein said fault detection means is configured to isolate faults in both an uplink (upstream as S2) from said head end of said network and a downlink (downstream as S1) from said head end of said network as claims.

Referring to claim 4, 14, and 24, Johnson discloses in claims 58 and 59 that an intelligent device (106 in figure 2) as recited in Claim 1 wherein said fault detection means is selected from the group via a loop-back mode for fault detection as claims.

Referring to claim 5, 15, and 25, Johnson discloses in figure 7 and on page 8, lines 28 to page 9, lines 42 that an intelligent device 106 as recited in Claim 1 wherein said intelligent device 106 is configured such that said intelligent device is provided power over said network as claims.

Referring to claim 6, 16 and 26, Johnson as disclosed in figures 2 and 7 that an intelligent device 106 being coupled to the head end 102 as recited in Claim 5 wherein



Art Unit: 2664

said head end 102 is configured to activate and deactivate said intelligent device 106 over said network based on its connection arrangement such that RDU 110 utilizes methods for diagnosing system failures both outside and inside hub 102 (disclosed on page 10, lines 34-36) as claims.

Referring to claim 7, 17, and 27, Johnson discloses on page 8 lines 12-39 that RDU knows that by performing the RDU station diagnostic test that S2 has valid data input and thus it is ready to connect S2 into the main loop thus an intelligent device 106 as recited in Claim 5 wherein said intelligent device 106 is configured to activate and deactivate said client devices such as S2 as claims.

Referring to claim 8, 18 and 28, Johnson discloses in Table 1 in conjunction with figures 3-5 and on page 7 lines 12 to page 8 lines 27 that an intelligent device 106 as recited in Claim 1 wherein said intelligent device (RDU) employs techniques such that (data from a station "upstream in the diagnostics loop relative to the station being monitored is able to flow to the RDU for analysis) said fault detection is operable to determine a distance (location based of the station/port/connection) from said intelligent device (106) to said fault as claims.

Referring to claim 9, 19 and 29, Johnson discloses on and on page 5, lines 25 to pages 6, lines 27 and on page 19, lines 18-33 of an intelligent device (FDU or RDU) as recited in Claim 1 wherein said intelligent device 106 is configured to receive data packets from said head end 102 since data comes into the hub serially and the data is fed to the RDU as illustrated in figures 2 and 3 for diagnosing system failures as claims.

Art Unit: 2664

Referring to claim 10, 20, and 30 Johnson discloses in figures 2 and 3 and on page 5, lines 25 to pages 6, lines 27 in addition to page 19, lines 18-33 of an intelligent device 106 as recited in Claim 9 wherein said data packets are for operating diagnostic tests at said intelligent device for validating network connections as claims.

***Response to Arguments***

3. Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**Or faxed to:**

(703)305-3988, (for formal communications intended for entry)

**Or:**

(703)305-3988 (for informal or draft communications, please label "Proposed" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chirag G Shah whose telephone number is 571-272-3144. The examiner can normally be reached on M-F 6:45 to 4:15, 2nd Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2664

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cgs  
December 27, 2004

  
**Ajit Patel**  
**Primary Examiner**